

REMARKS

Reconsideration and allowance of this application are respectfully requested in view of the above Amendment and the discussion below.

Applicants invention concerns a vehicle controller having a rectangular printed circuit board 4 fixed to the inside of the housing 3 and containing a control circuit. A plurality of plugs are provided along one side of the rectangular board to transfer signals between the inside and the outside of the housing. The plugs contain plug pins which are electrically connected to the printed circuit by bonding wires inside the housing.

Claims 1-3, 6 and 8 have been rejected under 35 U.S.C. §102 as anticipated by Howard as indicated at item 5 on page 4 of the patent Office Action, while claim 4 has been rejected under 35 U.S.C. §103 as unpatentable over Howard in view of Kerner et al.

Applicants respectfully traverse these rejections on the grounds that independent claims 1 and 8 each provide structure not shown or disclosed by Howard or Kerner.

The reference to Howard (U.S. Patent No.: 6,386,891) is a multi port assembly having a floating electrical circuit board. Such multi port assemblies are used to provide power to devices such as proximity sensors and other motion control or sensing devices.

According to Applicants invention, as defined by independent claims 1 and 8, the rectangular printed circuit board is "fixed" to the inside of the housing. This specific limitation is contained in each of independent claims 1 and 8. Howard does not have a circuit board fixed to the housing because it is specifically a purpose of Howard to have a floating electrical circuit board. Additionally, claim 1 recites a plurality of plugs provided along one side of the rectangular circuit board. Howard has a plurality of circuit boards and there is only one plug provided along one side of each board.

The reference to Kerner (U.S. Patent No.: 6,028,770) is a control device for a motor vehicle, however, there is no indication that it would be obvious to

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 4.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

modify the enclosure assembly of Howard with the control plugs of Kerner in order to provide more functionality for the box of Howard as it is indicated in the rejection. As indicated above, the purpose of Howard is to provide a "floating electrical circuit board" within an enclosure assembly and modifications to Howard to function in a vehicle and motor control signaling system would not be obvious because in order to meet the claimed limitations the circuit board would have to be fixed to the housing which is contrary to the essence of the reference to Howard.

In response to the objection to the drawing, Applicants are submitting for approval a proposal to modify circuit showing of Figure 4a. It is to be noted that the Office Action indicates that an insulator should be alternately thick and thin lines in accordance with chapter 6 of the MPEP. Applicants submit, however, that page 600-45 indicates an electrical insulation having only thick lines. Furthermore, item 4a in Figure 4 is the only showing of the circuit board requiring cross hatching.

Applicants have amended the Abstract and corrected claim 7 in order to address the objections of items 2 and 3 on page 2.

In response to the indicated allowable subject matter of claims 5, 7 and 9-15, Applicants have provided these claims in independent format.

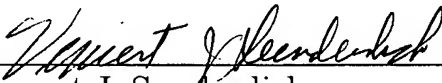
Therefore, in view of the distinguishing features between the claimed invention and the references and in view of the indicated allowable subject matter, Applicants respectfully request that this application containing claims 1-15 be allowed and be passed to issue.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #056208.52612US).

Respectfully submitted,

February 9, 2005



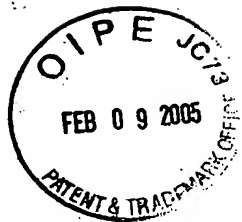
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Enclosures: One (1) sheet of Replacement drawing (Fig. 4)
One (1) sheet of Annotated drawing showing changes (Fig. 4)

ABSTRACT OF THE DISCLOSURE

A device for controlling a vehicle 8 ~~comprising~~ having a housing 3, a rectangular printed circuit board 4 which is fixed to the inside of the housing and has a control circuit thereon, ~~and plugs.~~ Plugs 1a and 1b are provided along one side of the rectangular printed circuit board 4 to transfer signals between the inside and the outside of ~~said the~~ the housing 3[[:]]. ~~wherein the~~ The plugs 1a and 1b respectively contain plug pins and the plug pins 2 are electrically connected to the printed circuit board 4 via bonding wires 5 inside the housing 3.



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FIG. 4

